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BANGLADESH LANDSAT-2 PROGRAMME

I. INTRODUCTION

Title of Investigation : Investigations using data from Landsat-2.

Investigation Number : # G 27950

Principal Investigator : Dr. Anwar Hossain,
Chairman, Bangladesh Atomic Energy Commission.

Name and Address of Principal Investigator's Organisation : Bangladesh LANDSAT Programme
House No.605, Road No.18,
Dhanmondi Residential Area,
Dacca, Bangladesh.

Date : February 1977.

Type of Report and period covered : Quarterly Report
October-December, 1976.

Name and Address of National Sponsoring Agency : Bangladesh National ERTS Programme
Science & Technology Division,
Ministry of Education,
Government of the People's Republic of Bangladesh,
Dacca, Bangladesh.

II. TECHNIQUES

Landsat imageries were reproduced by using conventional photographic techniques. The products used for analysis, consist mainly of black and white prints of 9 1/2 inch and 18 inch sizes. In some cases, false colour composite and slides were also used. Interpretation was done mainly by usual observation in all MSS bands. Stereoscope, Light Tables, slide projector etc were also used when required. The Landsat

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III. ACCOMPLISHMENTS

Government of Bangladesh has released funds for operation of the Landsat programme. UNDP has ordered some equipment/materials part of which have already arrived Bangladesh and others are expected soon.
 Under UNDP/FAO sponsorship, Professor Norman H. MacLeod, Director, Earth Resources Development Institute, Washington, arrived Dacca in December 1976 as consultant for Bangladesh Landsat Programme. He made valuable

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contributions for our programme. He helped us in preparing a programme to be financed by IBRD in connection with preparation of Land-use Map (Digital) of Bangladesh, using Landsat imageries. Another project for studies of water shed areas for Chittagong Hill Tracts and Surface Water Distribution and Salinity Intrusion in the South-west Bangladesh has been prepared. This is likely to be financed by IDRC of Canada. Chairman and Members of the Task Force were principally involved in the organisation of first ever International ecological conference in the country - the Fourth Commonwealth conference on Human Ecology and Development, Dacca, December 13-18, 1976. Dr. Anwar Hossain, Chairman of the LANDSAT Task Force was the Chairman of organising committee and Mr. M.U. Chowdhury, Secretary of the Task Force was the Secretary of the organizing committee for this conference.

IV. SIGNIFICANT RESULTS

1. A Govt. Notification has been issued on the basis of Landsat mosaics of Coastal Area for setting aside the new lands for afforestation in the coastal area. District-wise areas covered in the afforestation programme are given below:-

Chittagong	-	195,000	Acres
Noakhali	-	450,000	"
Barisal	-	360,000	"
Patuakhali	-	225,000	"

2. Landsat imageries have been used for identification of drainage patterns both old and new in the Comilla District.

3. The detailed results so far obtained using Landsat imageries have been presented to NASA by a joint report of Dr. Anwar Hossain and Mr. M.U. Chowdhury during October 18-20, 1976 discussion session at the Goddard Space Flight Center.

V. PUBLICATIONS

The following papers/articles/reports etc have been published during this period.

1. Remote Sensing Activities in Bangladesh: A paper presented by Dr. A.M. Choudhury in the UN/IAF Workshop held in Anaheim, California, U.S.A., from Sept. 26 to Oct. 9, 1976.

2. Bangladesh LANDSAT Programme: A Review of the programme and A report on the Result of investigation by Dr. Anwar Hossain, and Mr. M.U. Chowdhury, Presented at the discussion session at Goddard Space Flight Centre, NASA, October 18-20, 1976.

3. Land from the Bay by Dr. A.M. Choudhury - published in the Bangladesh Times on October 4, 1976.

4. A Satellite for the Millions by Dr. A.M. Choudhury - published in the Bangladesh Times on October 12, 1976.

5. Human Ecology and Development. An Address at the inaugural session of the Fourth Commonwealth Conference on Human Ecology and Development Dacca, December 13, 1976 by Dr. Anwar Hossain.

6. Human Ecology case studies in Bangladesh by M.U. Chowdhury, Fourth Commonwealth Conference on Human Ecology and Development, Dacca, December 13-18, 1976.

VI. PROBLEMS

Procurement of sophisticated equipment, appointment of long term remote sensing adviser and full time officer and staff are in the process.

VII. DATA QUALITY AND DELIVERY

The quality of the data products is good. We have received Landsat-2 imageries from EROS data center upto March 1976. Inquiry Forms have been sent to EROS data centre for available data products since April 1976.

VIII. RECOMMENDATIONS

It is recommended that NASA may take the photographs of Bangladesh by Landsat-2 as per our revised request already sent.

NASA also may ensure the continuity of Landsat satellites. Proposal for participation in Landsat-C has been sent. This may be accepted. A Landsat Data Receiving facility should be established in the region so that dynamic features can be studied.

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IX. CONCLUSIONS

Landsat imageries have found useful utilisation in Bangladesh's National Development Activities. The coastal Afforestation Programme of the Bangladesh Government is now being legally covered by the Landsat mosaic. There is a great demand for copies of this mosaic, which the programme is unable to cater presently. It is expected that with the arrival of equipments and accessories the programme will be able to cater this need of the country. The mapping (Digital) programme that has been prepared with Dr. MacLeod's guidance will be an extremely useful contribution to the national development planning, as the country's next development plan will badly need such a map both during the planning and implementation stage. LANDSAT imageries have thus become a vital resource management tool in Bangladesh.

